

REMARKS

A Non-Final Office Action dated May 22, 2006 rejected pending Claims 1-21. In this Response, Claims 1-21 are amended. No new matter is added by way of these amendments. For at least the reasons discussed herein, each of the presently pending claims are now in condition for allowance.

Information Disclosure Statement:

The Office Action acknowledges that the Information Disclosure Statement (IDS) submitted on July 16, 2004 is in compliance with 37 C.F.R. §§ 1.97, 1.98 and the Examiner has acknowledged his consideration of each reference submitted in the IDS by signing the submitted form 1449 and initialing each reference listed on the form 1449. The Examiner has noted, however, that the IDS submission was not signed by the previous attorney for the Applicants, Stephen A. Terrile. As required by the Examiner, Applicants have attached to this paper, a copy of the PTO Form 1449 previously submitted on July 16, 2004 and an IDS signed by the present attorney for the Applicants.

Specification:

The Office Action objects to several typographical errors on page 6, lines 14 and 19 and on page 9, line 7. Applicants have amended the Specification to correct these typographical errors. Furthermore, Applicants have amended other lines of the Specification to correct additional typographical or minor grammatical errors. No new matter has been added and therefore, Applicants request entry of the amendments to the Specification.

The Office Action objects to the Specification as failing to provide proper antecedent basis for the terms "more significant bit compare" and "less significant bit compare" as used in the original claims. In light of the above amendments to the claims, Applicants deem this objection to have been rendered moot.

Claim Objections:

The Office Action objects to claim 20 as appearing to be a dependent claim, yet having no mention of which claim it is dependent upon. Claim 20 has been amended to depend from claim 15.

Claim Rejections - 35 U.S.C. §112:

The Office Action rejects Claims 1-21 as being indefinite. In particular, the Office Action alleges that the terms “more significant bit compare” and “less significant bit compare” are indefinite. In light of the above amendments to the claims, Applicants deem this rejection to have been rendered moot.

Furthermore, the Office Action alleges that the terms “low address,” “high address,” and “mid address” render claims 4, 11, and 18 indefinite. Applicants assume that the Examiner meant to allege that these terms render claims 5, 12, and 19 indefinite since these terms appear in the original claims 5, 12, and 19 rather than in original claims 4, 11, and 18. Applicants note, however, that in light of the above amendments to the claims, this rejection has been rendered moot.

The Office Action objects to the limitation “the second compare unit processor” in claim 15 due to insufficient antecedent basis. Claim 15 has been amended to recite “the second compare unit” rather than “the second compare unit processor.”

Claim Rejections - 35 U.S.C. § 103

Claims 1-2, 4-5, 8-9, 11-12, 15-16 and 18-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pedneau, U.S. Patent No. 6,189,074 and Watanabe, U.S. Patent No. 5,109,335.

Independent claim 1, as amended, is reproduced below for the Examiner's convenience.

1. A method of performing a fast information compare within a processor comprising:
performing a first comparison when a first information is loaded into a translation lookaside buffer, comparing bits corresponding to a page number of the first information being loaded into the translation lookaside buffer with bits corresponding to a page number of a compare information;
storing a result of the first comparison within the translation lookaside buffer as part of an entry corresponding to the first information; and
using the stored result in conjunction with a second comparison comparing bits corresponding to a page offset of a second information and bits corresponding to a page offset of the compare information to determine whether a match is present between the second information and the compare information.

Pedneau or Watanabe, alone or in combination, do not teach or suggest, for example, "using the stored result in conjunction with a second comparison comparing bits corresponding to a page offset of a second information and bits corresponding to a page offset of the compare information to determine whether a match is present between the second information and the compare information." The Examiner, in applying a combination of Pedneau and Watanabe to original claim 1, has alleged that Watanabe teaches the "using" element of original claim 1 by citing to FIG. 4 and column 4, lines 35-51 of Watanabe and noting that "the comparator compares the TLB result with the output from the LBAA to determine a hit." (See Office Action, page 7). Applicants note, however, that the Examiner's citation to Watanabe merely discloses a comparison between a physical address provided by the TLB and an output from the LBAA. Watanabe, does not teach or suggest, for example, using (1) a stored result from a comparison between bits of a first information and a compare information in conjunction with (2) a comparison between bits of a second information and the compare information. Additionally, Watanabe, does not teach or suggest, for

example, a comparison between bits corresponding to a page offset of a second information and bits corresponding to a page offset of the compare information. Furthermore, Pedneau does not overcome the above noted deficiencies of Watanabe. Hence, Pedneau or Watanabe, alone or in combination, do not teach or suggest each and every element of amended independent claim 1. Accordingly, amended independent claim 1 is in condition for allowance.

Amended independent Claims 8 and 15 recite similar, albeit different limitations as amended independent Claim 1. At least for the reasons noted above, Pedneau or Watanabe, alone or in combination, do not teach or suggest each and every element of amended independent Claims 8 and 15. Accordingly, amended independent Claims 8 and 15 are in condition for allowance.

Claims 2, 4-5, 9, 11-12, 16, and 18-19 depend from one of the amended independent Claims 1, 8, and 15. For at least the reasons noted above, Pedneau or Watanabe, alone or in combination, do not teach or suggest each and every element of each of the Claims 2, 4-5, 9, 11-12, 16, and 18-19. Accordingly, Claims 2, 4-5, 9, 11-12, 16, and 18-19 are in condition for allowance.

Claims 3, 10, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pedneau and Watanabe and further in view of SPARC Joint Programming Specification (JPS1): Commonality manual. JPS1 does not overcome the above-noted deficiency of Pedneau and Watanabe. Hence, for at least the above reasons, Pedneau, Watanabe, or JPS1, alone or in combination, do not teach or suggest each and every element of each of the Claims 3, 10, and 17. Accordingly, Claims 3, 10, and 17 are in condition for allowance.

Claims 6, 13, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pedneau and Watanabe and further in view Akkary, U.S. Patent No. 5,671,444. Akkary does not overcome the above-noted deficiency of Pedneau and Watanabe. Hence, for at least the above reasons, Pedneau, Watanabe, or Akkary, alone or in combination, do not teach or suggest each and every element of each of the Claims 6, 13, and 20. Accordingly, Claims 6, 13, and 20 are in condition for allowance.

CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance. If any further questions remain, please do not hesitate to contact me.

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Respectfully submitted,

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